FIG. 1

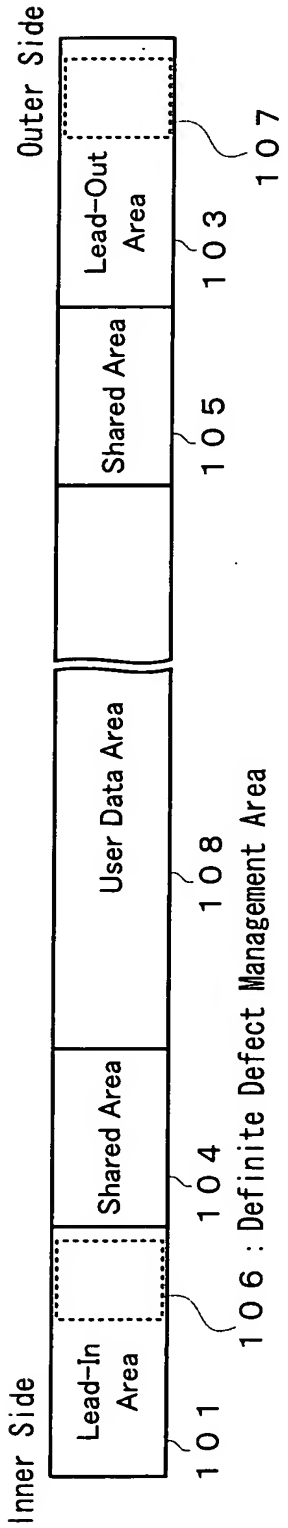

100
Outer Side
Inner Side
Lead-In Area
Shared Area
User Data Area
Shared Area
Lead-Out Area
101
104
108
105
103
107
106 : Definite Defect Management Area

FIG. 2

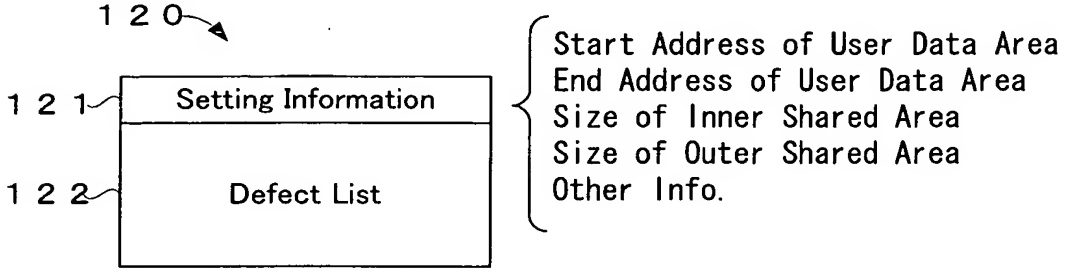


FIG. 3

122

Defect Address	Spare Recording Address	Other Info.
Address aaaa	Address gggg	
Address bbbb	Address kkkk	
Address cccc	Address mmmm	
Address dddd	Address nnnn	
⋮	⋮	

FIG. 4

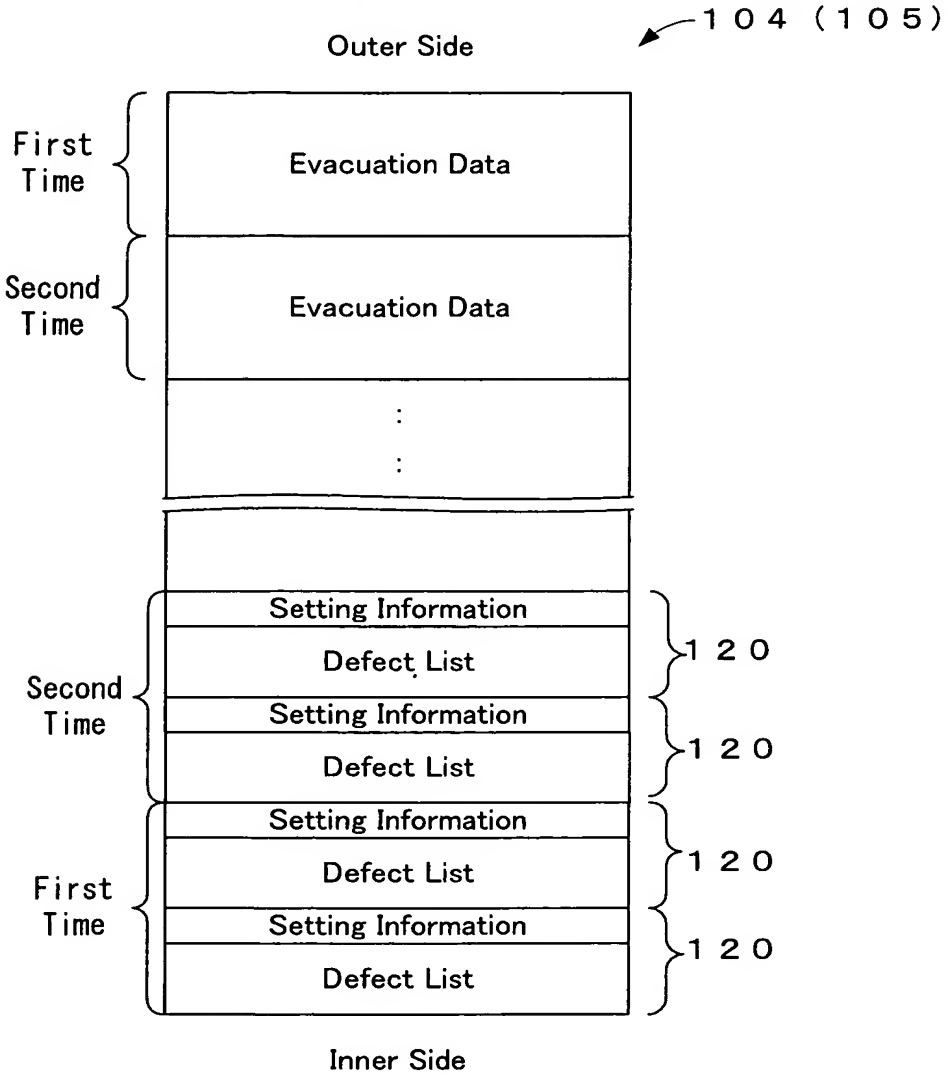

104 (105)
Outer Side
First Time
Second Time
Evacuation Data
Evacuation Data
Second Time
First Time
Setting Information
Defect List
Setting Information
Defect List
Setting Information
Defect List
Setting Information
Defect List
120
120
120
120
Inner Side

FIG. 5

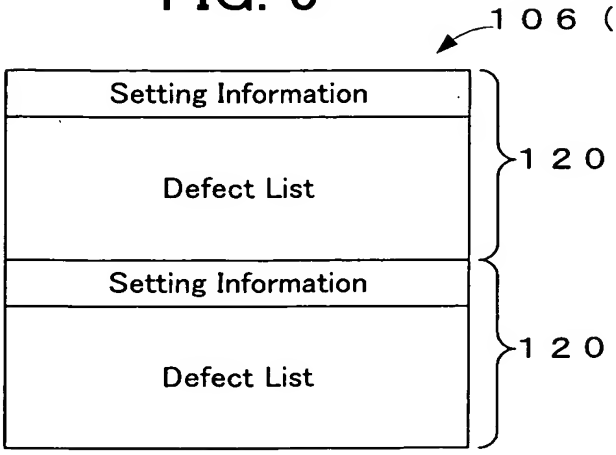

106 (107)
Setting Information
Defect List
Setting Information
Defect List
120
120

FIG. 6

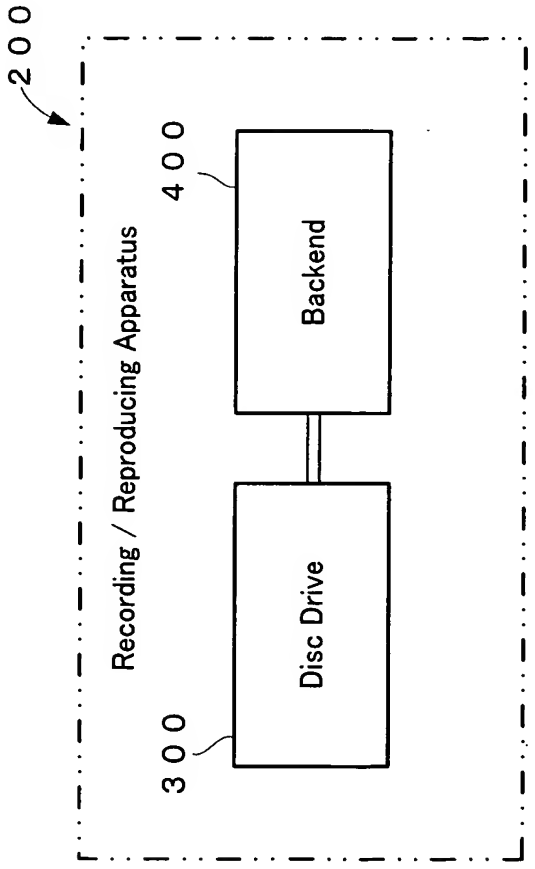

200
Recording / Reproducing Apparatus
400
Backend
Disc Drive
300

FIG. 7

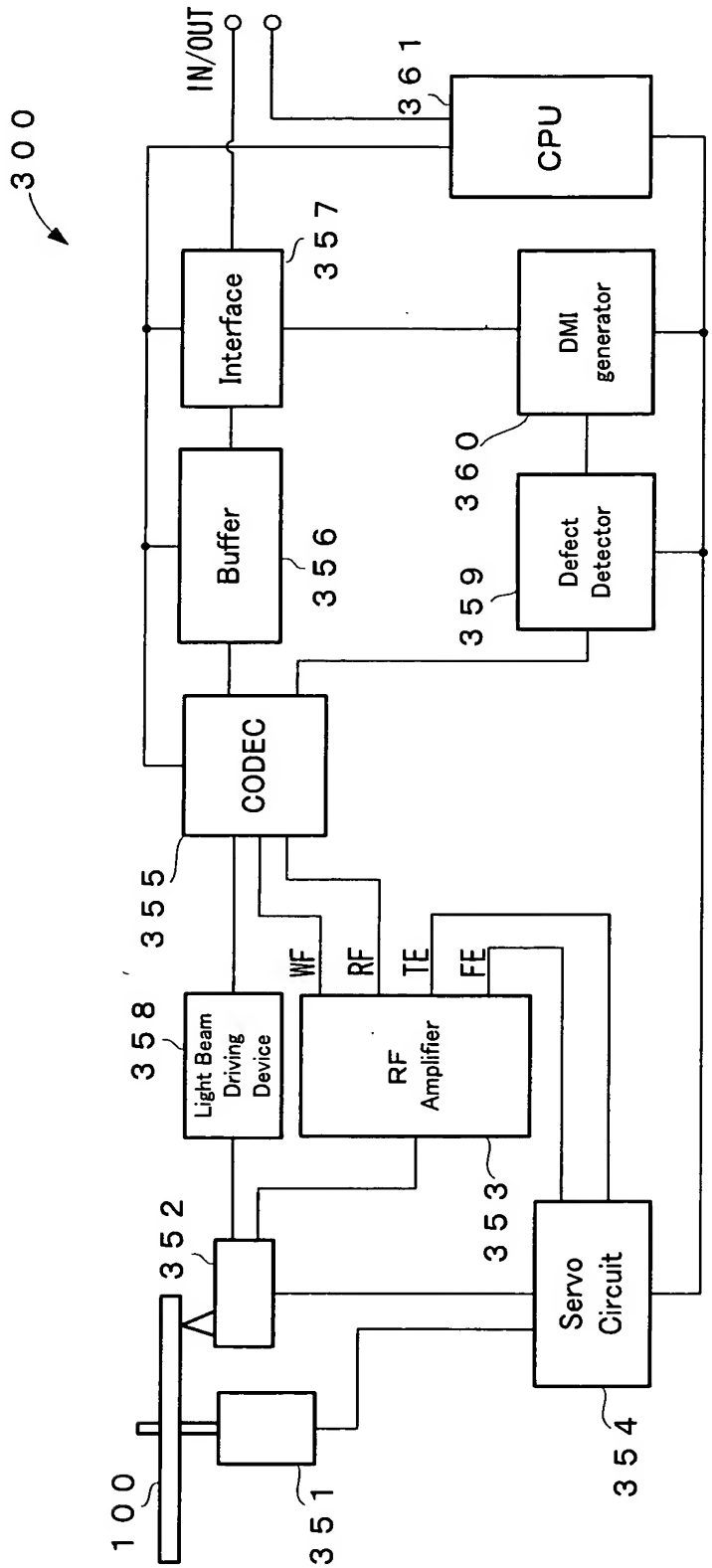

300
IN/OUT
361
CPU
357
Interface
DMI generator
360
Buffer
356
Defect Detector
359
CODEC
355
WF
RF
TE
FE
358
Light Beam Driving Device
RF Amplifier
353
352
Servo Circuit
354
100
351

FIG. 8

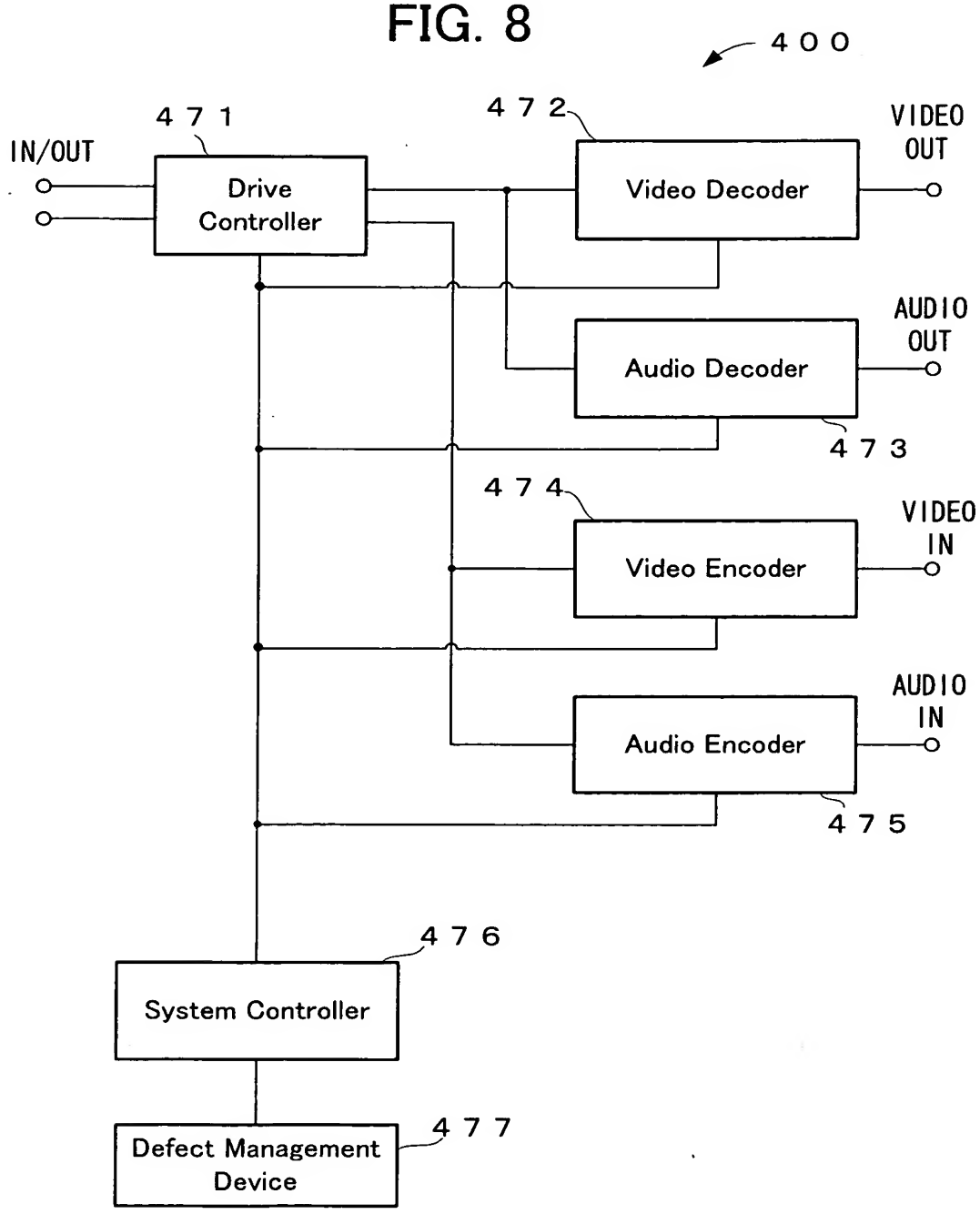

400
471
472
IN/OUT
Drive Controller
Video Decoder
VIDEO OUT
AUDIO OUT
Audio Decoder
473
474
Video Encoder
VIDEO IN
AUDIO IN
Audio Encoder
475
476
System Controller
477
Defect Management Device

FIG. 9

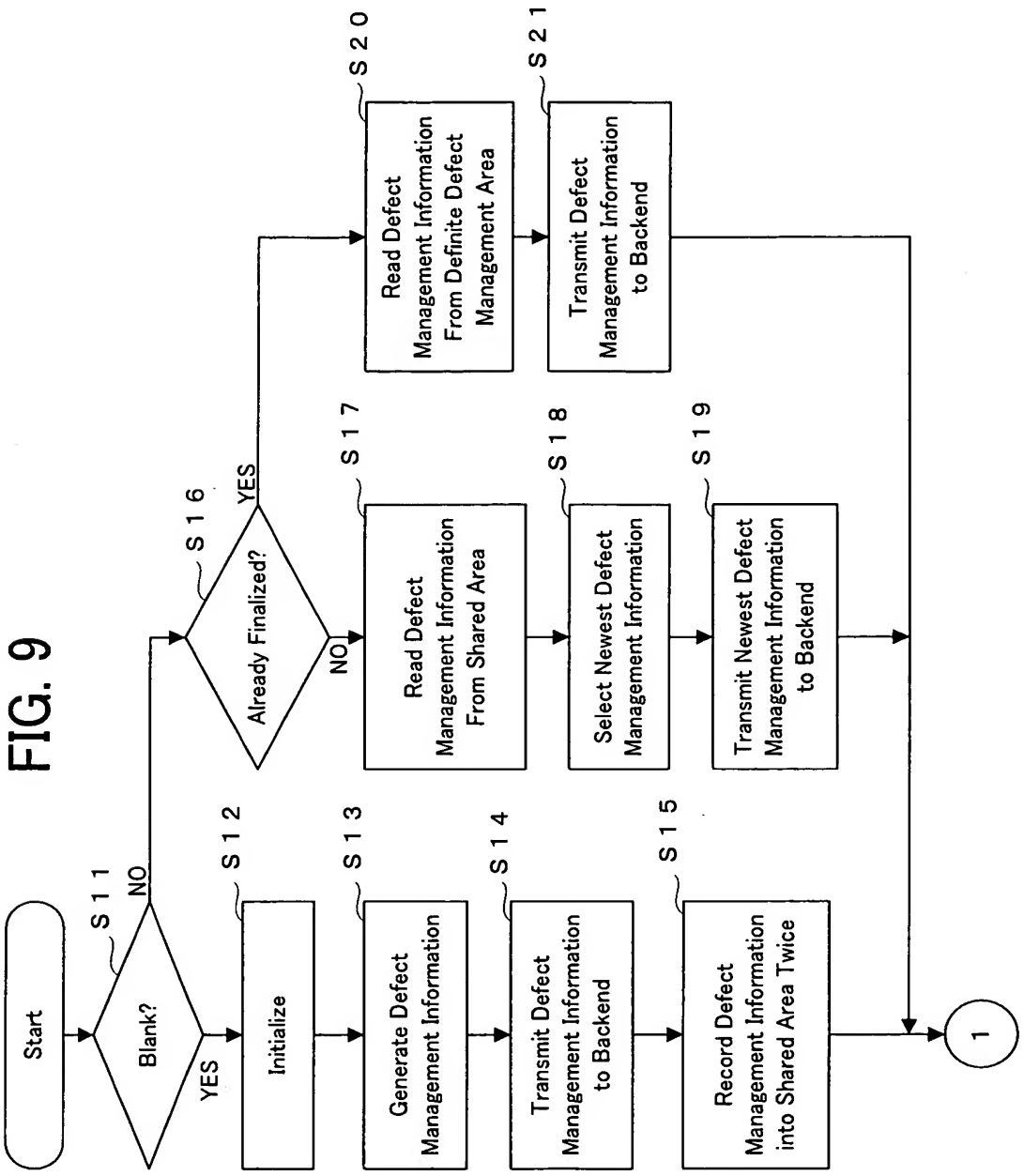

Start
S11
Blank?
NO
YES
S12
Initialize
S13
Generate Defect Management Information
S14
Transmit Defect Management Information to Backend
S15
Record Defect Management Information into Shared Area Twice
1
S16
Already Finalized?
YES
NO
S17
Read Defect Management Information From Shared Area
S18
Select Newest Defect Management Information
S19
Transmit Newest Defect Management Information to Backend
S20
Read Defect Management Information From Definite Defect Management Area
S21
Transmit Defect Management Information to Backend

FIG. 10

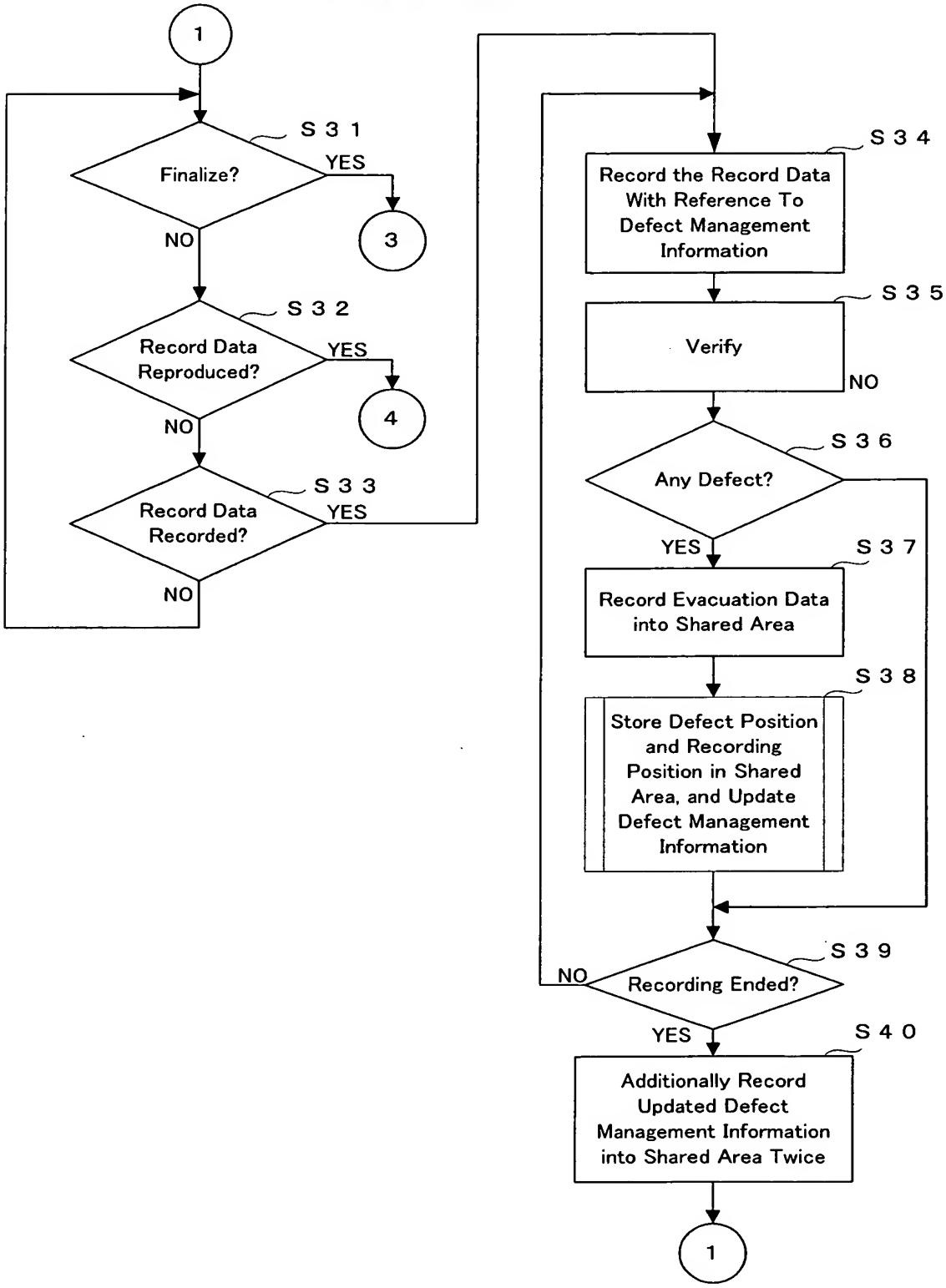

1
S 3 1
Finalize?
YES
NO
3
S 3 2
Record Data Reproduced?
YES
NO
4
S 3 3
Record Data Recorded?
YES
NO
S 3 4
Record the Record Data With Reference To Defect Management Information
S 3 5
Verify
NO
S 3 6
Any Defect?
YES
S 3 7
Record Evacuation Data into Shared Area
S 3 8
Store Defect Position and Recording Position in Shared Area, and Update Defect Management Information
S 3 9
Recording Ended?
NO
YES
S 4 0
Additionally Record Updated Defect Management Information into Shared Area Twice
1

FIG. 11(a)

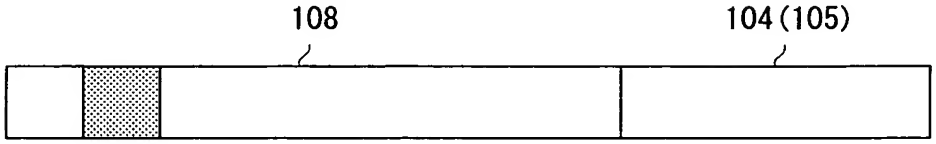


FIG. 11(b)

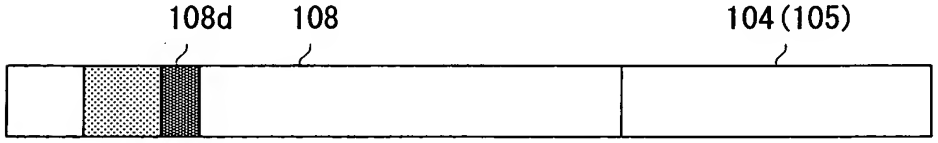


FIG. 11(c)

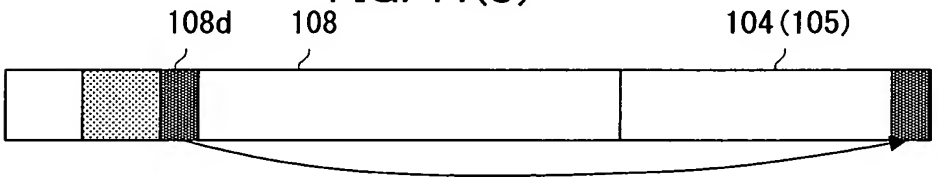


FIG. 11(d)

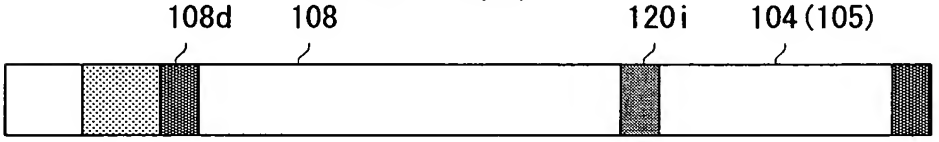


FIG. 11(e)

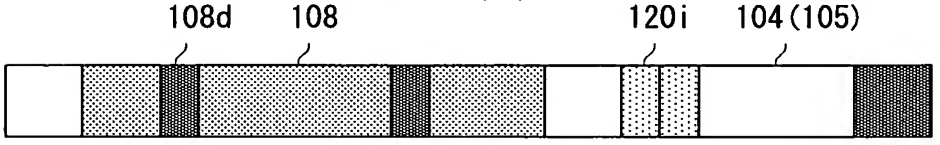


FIG. 11(f)

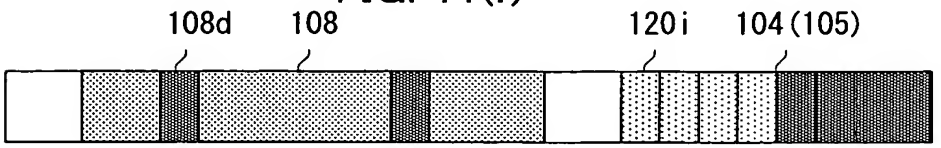


FIG .12

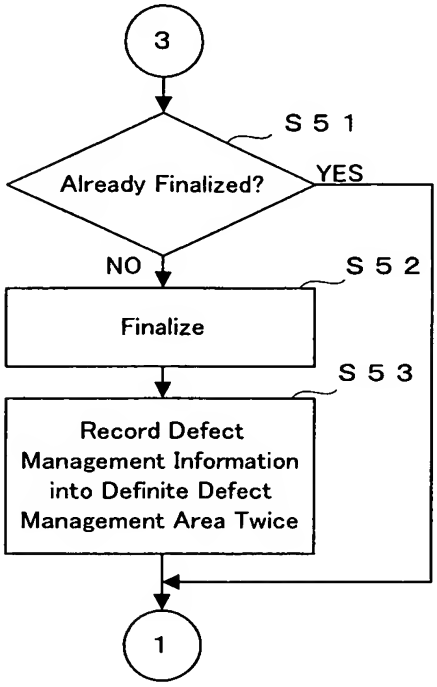

3
S 5 1
Already Finalized?
YES
NO
S 5 2
Finalize
S 5 3
Record Defect Management Information into Definite Defect Management Area Twice
1

FIG. 13

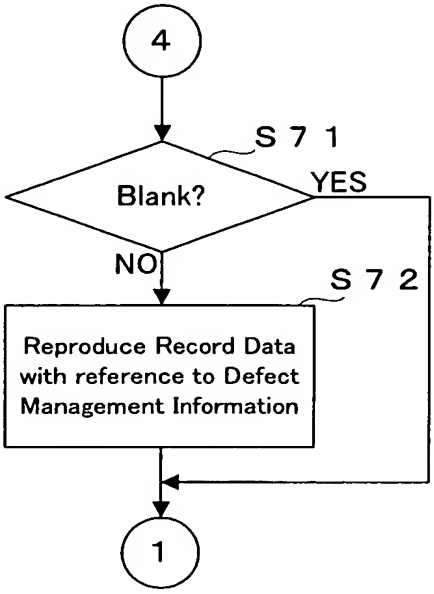
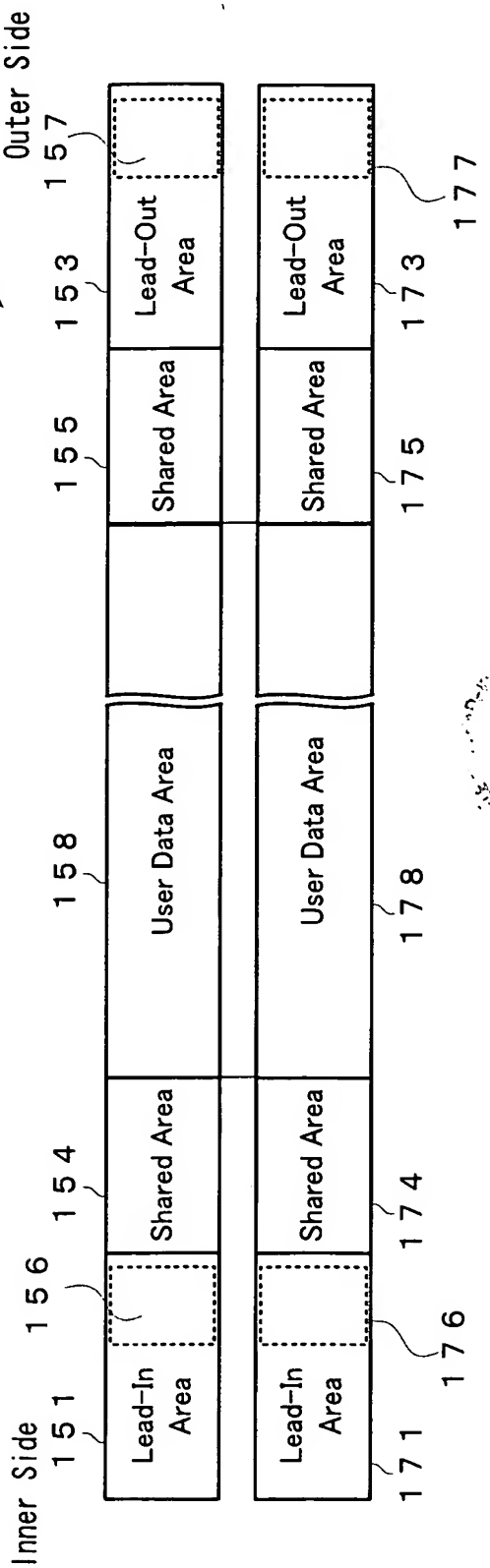

4
S 7 1
Blank?
YES
NO
S 7 2
Reproduce Record Data with reference to Defect Management Information
1

FIG. 14


150
Outer Side
157
Lead-Out Area
153
177
Lead-Out Area
173
Shared Area
155
Shared Area
175
User Data Area
158
User Data Area
178
Shared Area
154
Shared Area
174
156
176
Lead-In Area
151
Lead-In Area
171
Inner Side